

## REMARKS

### I. Status of the Application

Claims 29-41 are presently pending. Claims 29-37, 39-40 and 41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshida et al., U.S. Patent No. 5,574,117 in view of JP 51127181. Claim 38 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshida et al. in view of JP 51127181 and further in view of Wieczorrek, U.S. Patent No. 4,409,266. Applicants respectfully request reconsideration of the application in view of the following remarks, which are intended to place this case in condition for allowance.

Applicants have amended the claims under consideration to more clearly define and distinctly characterize Applicants' novel invention. Support for the amendments to claims 29 and 41 to recite "adhered to" can be found at least at paragraph [0003] of the published application, where Applicants teach that a protective coating is formed that exhibits sufficient adhesion to the surface of a greenhouse. The amendments contain no new matter and present no new issues requiring further search. Applicants respectfully request entry and consideration of the foregoing amendments, which are intended to place the case in condition for allowance.

### II. Claims 29-40 Are Nonobvious Over Yoshida et al. in View of JP 51127181 Alone or in Combination with Wieczorrek

At page 2 paragraph 3 of the instant Office Action, claims 29-37 and 39-41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshida et al., U.S. Patent No. 5,574,117 in view of JP 51127181. At page 5, paragraph 4 of the instant Office Action, claim 38 stands rejected over Yoshida et al. and JP '181 further in view of Wieczorrek, U.S. Patent No. 4,409,266. Applicants respectfully traverse these rejections based on the amended claims now presented.

The combination of Yoshida et al. and JP '181 fails to render the claimed invention obvious. The Office Action asserts that Yoshida et al. "clearly motivates those skilled in the art to do so by utilizing his protective film coating removable by alkali solution for agricultural purposes." The Office Action further asserts that JP '181 discloses selectively light transmitting films that are useful for agricultural greenhouses or covers for solar water heating devices. The Office Action concludes that both Yoshida et al. and JP '181 disclose substantially identical polymer films wherein Yoshida et al. teaches the characteristics as instantly claimed, and provides clear motivation and suggestion to use his films for protective coatings in agricultural use and that JP '181 teaches these polymers to be used in a greenhouse. Applicants disagree with these assertions.

The amended claims are directed in part to a greenhouse having a *removable* protective *coating* that is *adhered to* a substantially transparent surface. Applicants' claimed protective coating has an adhesive strength that overcomes the disadvantages of insufficient adhesion or adhesion that is too strong (paragraph [0011]). When the adhesive strength of a greenhouse coating is too low, the coating will not be resistant to weather influences and it will be necessary to restore or replace the coating several times per season (paragraph [0003]). When the adhesive strength of a greenhouse coating is too strong, it requires much effort to remove the coating at the end of the season. *Id.* In contrast to the art at the time of filing, Applicants' claimed protective coating can easily be removed from the greenhouse when its presence is no longer required.

Applicants respectfully submit that greenhouses known in the art at the time of filing were either constructed from polymeric films or from materials such as glass and steel. In the art, when a greenhouse was constructed from a polymeric film, that film needed to be

*transparent* for the crops in the greenhouse to receive sufficient light. In contrast to greenhouses known in the art at the time of filing, the coating of the claimed invention can reduce or even block UV radiation during periods wherein the sunlight is too harsh.

The Office Action fails to identify *any* reference that teaches the claimed coating on a greenhouse, and a combination of the cited references fails to provide such a teaching. Based on the teachings of Yoshida et al. in view of JP '181, one of skill in the art would not arrive at the claimed greenhouse having a substantially transparent surface and a *removable protective coating adhered* to the substantially transparent surface. Nowhere does Yoshida et al. teach or suggest using their formulations with *any* greenhouse, let alone Applicants' claimed greenhouse having a *removable protective coating adhered* to the substantially transparent surface. Indeed, the Office Action *admits*, at page 3, that Yoshida et al. *does not teach their coating as a greenhouse*. Instead, Yoshida et al. teaches an alkali-soluble *film* for agricultural uses such as for *packaging* of food for animals (column 8, lines 17-27). Yoshida et al. teaches that the films taught therein are “useful as a packaging film, a base material of labels, and in addition, as a separating film....” *Id.* Nowhere does Yoshida et al. teach or suggest a removable protective coating that is *adhered to* the substantially transparent surface of a greenhouse. Yoshida et al. fails to recognize that any greenhouse could be made using their materials, let alone appreciate that a greenhouse having a substantially transparent surface and a *removable protective coating adhered* to the substantially transparent surface could be made or would provide the advantages of Applicants' claimed greenhouse.

Further, the *films* of Yoshida et al. are *not equivalent* to Applicants' claimed *adhesive coating*, and one of ordinary skill in the art would not arrive Applicants' claimed protective coating adhered to a substantially transparent surface of a greenhouse based on the mere

teachings of a *film* by Yoshida et al. At the very most, one of skill in the art may be motivated to fashion packaging items, labels or separating items from Yoshida's films. It is not apparent in the teachings of Yoshida et al. that it would even be possible to somehow transmute their films into the claimed adhesive coating. In any case, Yoshida et al. provides absolutely no motivation to do so. For at least these reasons, based on the teachings of Yoshida et al., one of ordinary skill in the art would *not* arrive at an *adhesive coating* for use on a greenhouse.

JP '181 fails to cure the deficiencies of Yoshida et al. JP '181 teaches a light transmitting film layer that can be used for agricultural greenhouses. JP '181 does *not* teach or suggest a greenhouse having a *removable* protective coating adhered to a substantially transparent surface. In contrast, JP '181 teaches that *the film itself* is the transparent surface. In fact, the title of JP '181 refers to "greenhouse construction." *Constructing* a greenhouse from a light transmitting film layer in which this layer *is* the greenhouse is very different from *providing a coating* to a greenhouse. Given that the film taught by JP '181 is used to form the actual greenhouse, if one were to remove the polymeric film, one would remove the entire greenhouse. Thus, JP '181 provides no motivation to add a coating to a greenhouse. Accordingly, the combination of Yoshida et al. and JP '181 fails to render the claimed invention obvious.

The Office Action states that JP 05170941 and U.S. Patent No. 5,519,964 also teach the use of substantially similar polymer films in greenhouses, thus showing that at the time the invention was made the use of polymer films of Applicants was conventionally used in greenhouses. Applicants respectfully disagree. Neither JP '941 nor the '964 patent teach or suggest Applicants' claimed greenhouse having a removable protective coating adhered to a substantially transparent surface.

JP '941 teaches a film for use in greenhouses (abstract). This reference neither teaches nor suggests a removable protective coating adhered to a substantially transparent surface of a greenhouse. Like JP '181, JP '941 instead teaches that *the film itself is the transparent surface*. Accordingly, if one were to remove the polymeric film, one would remove the entire greenhouse.

The '964 patent teaches a double-layered composite plastic film for use with a greenhouse (column 1, lines 10-19). The '964 patent teaches that *both layers* are to be *used together* (column 5, lines 31-34), and that the composite plastic film is attached to an overlay polyester resin film by hot lamination (column 10, lines 43-55). Thus, the '964 patent *teaches away* from removing one of the two layers such that a single layer remains for use in a greenhouse. Nowhere does the '964 patent provide any motivation to make a greenhouse having a *removable* protective *coating* adhered to a substantially transparent surface. Accordingly, Yoshida et al., JP '181, JP '941 and the '964 patent, alone or in combination, fail to render the claimed invention obvious.

The Supreme Court has stated that “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently known in the prior art,” and that “[o]ften, it will be necessary for a court to look to...the background knowledge possessed by a person having ordinary skill in the art, all *in order to determine whether there was an apparent reason to combine* the known elements in the fashion claimed by the patent at issue” (*KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. \_\_\_\_ (2007), slip op. at 14, emphasis added). The Office Action has provided no evidence that, at the time of filing the instant specification, the references provided an apparent reason to alter the alkali-soluble films of Yoshida et al. to arrive at Applicants' claimed invention, particularly given the fact that Yoshida et al. does not teach or suggest removable protective coatings on greenhouses. The secondary references JP '181 and JP

‘941 merely teach that *the film itself* is the transparent surface, i.e., the film forms the actual greenhouse. Removal of such a film would remove the entire greenhouse. Accordingly, these references provide no apparent reason to modify Yoshida et al. to arrive at the claimed invention. The ‘964 patent teaches two layers of a greenhouse that are permanently attached together and, accordingly, *must be used together*. Thus, the ‘964 patent provide no apparent reason to modify Yoshida et al. to arrive at the claimed invention.

The Memorandum regarding KSR from the Deputy Commissioner for Patent Operations states, “[t]he Court did not totally reject the use of “teaching, suggestion, or motivation” as a factor in the obviousness analysis. Rather, the Court recognized that a showing of “teaching, suggestion, or motivation” to combine the prior art to meet the claimed subject matter could provide a *helpful insight in determining whether the claimed subject matter is obvious under 35 U.S.C. § 103(a)*,” (U.S. Patent and Trademark Office May 3, 2007 Memorandum from Deputy Commissioner for Patent Operations regarding the Supreme Court decision on *KSR Int'l Co. v. Teleflex Inc.*). Accordingly, the fact that none of the cited references provide any teaching, suggestion or motivation to use a *removable* protective coating adhered to a substantially transparent surface *must be considered*.

With respect to claim 38, the Office Action states that those skilled in the art would have found it obvious to utilize the silane adhesion promoter of Wieczorrek in the coating of Yoshida et al., because doing so will enhance adhesion properties of the polymer film to the glass substrate. The Office Action admits that Yoshida et al. and JP ‘181 do not disclose silanes as adhesion promoters.

For at least the reasons set forth above, Yoshida et al. and JP ‘181 fail to render the claimed invention obvious. Wieczorrek et al. fails to cure the deficiencies of the primary

references. Wieczorrek et al. is directed to a process for the shatterproof coating of glass surfaces, particularly glass bottles, by applying a physically drying priming lacquer containing a silane adhesion promoter (column 1, lines 7-9; column 2, lines 16-20). Nowhere does Wieczorrek et al. teach or suggest a greenhouse having a removable protective coating adhered to a substantially transparent surface.

Thus, the combination of references cited in the instant Office Action, alone or in combination, fail to teach or suggest the claimed invention. Accordingly, Applicants respectfully request that the rejection of claims 29-41 under 35 U.S.C. § 103(a) as being unpatentable over Yoshida et al. in view of JP 51127181 or Yoshida et al. in view of JP 51127181 further in view of Wieczorrek be reconsidered and withdrawn.

### III. Conclusion

Having addressed all outstanding issues, Applicants respectfully request reconsideration and allowance of the case. To the extent the Examiner believes that it would facilitate allowance of the case, the Examiner is requested to telephone the undersigned at the number below. The Commissioner is authorized to apply any charges and credit any overpayments to Deposit Account No. 19-0733.

Respectfully submitted,

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